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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,173	12/20/2001	Masayuki Yurimoto	7217/66127	9743

7590 03/17/2003

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EXAMINER

NGUYEN, PHUNG

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 03/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,173

Applicant(s)

YURIMOTO ET AL.

Examiner

Phung T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001 5/22/02 Rich
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities:

Claim 2, line 6, "form" should be changed to --from--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 4, 9, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith [U.S. Pat. 6,160,493]

Regarding claim 1: Smith discloses a radio warning system for hazard avoidance which comprises all subject matter as follows:

- a. detecting means for detecting position information of the transmitting vehicle (col. 3, lines 24-35);
- b. transmitting means for transmitting the position information and the alarm information (col. 4, lines 41-54, col. 5, lines 66-67, and col. 6, lines 1-7);
- c. receiving means for receiving the position information and the alarm information transmitted from the transmitting vehicle (col. 6, lines 8-34);

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d. output means for outputting the alarm information (col. 6, lines 27-34); and

e. control means for performing control the alarm information is outputted from the output when the control means determined distance from the receiving vehicle based on the position information (col. 6, lines 34-43).

Regarding claim 4: Smith discloses transmitting type information specifying a type of the alarm information; receiving type information; and changing the output of the alarm information from the output means according to the specified type of the alarm information (col. 5, lines 15-32).

Regarding claim 9: All the claimed subject matter is already discussed in respect to claim 1 above. Smith also teaches inputting means in the form of user interface 112 (figure 1A, col. 4, lines 41-45) for inputting alarm information.

Regarding claim 12: Smith discloses the inputting means inputs a type of the alarm information; transmitting means adds the type to the alarm information; receiving means receives a signal including the type from the second vehicle; and output control means changes an output of the alarm information according to the type (col. 5, lines 15-32).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, 8, 10, 11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Watanable [U.S. Pat. 5,450,057].

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Regarding claim 2: Smith discloses the control means determines that the transmitting vehicle is present within the predetermined distance (col. 6, lines 34-43) except that the control means changes a direction of output of the alarm information from the output means according to a direction of the transmitting vehicle. However, Watanable discloses a stereophonic warning apparatus comprising the controlling means controls an output level of each of the speakers 130 and 131 (figure 1, col. 1, lines 16-20 and lines 53-59, and col. 4, lines 10-30) according to the direction of the vehicle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of Watanable in the system of Smith to change the direction of output of the alarm information in order to perceive the direction of the vehicle that has transmitted the alarm sound which is an advantage.

Regarding claim 3: Watanable discloses the control means changes an output level of the alarm information from the output means according to a distance between the receiving vehicle and the transmitting vehicle (col. 4, lines 15-17).

Regarding claim 8: Watanable discloses transmitting a vehicle speed; receiving the vehicle speed; and the control means changes an output level of the alarm information according to the vehicle speed (col. 4, lines 10-15).

Regarding claim 10: Watanable discloses calculating a direction of the second vehicle with respect to the first vehicle; and the output control means changes a direction of output of the alarm information according to the calculated direction (col. 4, lines 10-45).

Regarding claim 11: Watanable discloses the output control means changes an output level of the alarm information according to the distance (col. 4, lines 15-17).

Regarding claim 16: Watanable discloses transmitting means adds a vehicle speed of the first vehicle to the alarm information; receiving means receives a signal including the vehicle speed from the second vehicle; and output control means changes the predetermined distance for determining according to the vehicle speed (col. 4, lines 10-45).

6. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Sadler [U.S. Pat. 3,949,300].

Regarding claim 5: Smith discloses the type information specifying the type of the alarm information (col. 5, lines 15-32) but fails to disclose the alarm information specifies at least a horn signal as claimed. However, Sadler discloses an emergency radio frequency warning device comprising the alarm information specifies at least a horn signal (col. 2, lines 20-34). Therefore, it would have been obvious to the skilled artisan to employ the alarm type (horn signal) of Sadler into the system of Smith to reproduce the originating sound, thereby warning the driver of potential danger.

Regarding claim 13: Smith discloses the type information specifying the type of the alarm information (col. 5, lines 15-32) but fails to disclose the alarm information represents a horn signal as claimed. However, Sadler discloses an emergency radio frequency warning device comprising the alarm information represents a horn signal (col. 2, lines 20-34). Therefore, it would have been obvious to the skilled artisan to employ the alarm type (horn signal) of Sadler into the system of Smith to reproduce the originating sound, thereby warning the driver of potential danger.

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7. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Reeves [U.S. Pat. 6,211,778].

Regarding claim 6: Smith discloses the radio warning signal is transmitted from the vehicle to any receivers that might be operating within the predetermined distance (col. 6, lines 38-42). Smith does not show changing the predetermined distance according to the information specifying the alarm information as claimed. However, changing the predetermined distance according to the alarm information is known in the art as taught by Reeves (col. 3, lines 66-67, and col. 4, lines 1-14). Therefore, it would have been obvious to one of ordinary skill in the art to use the teaching of Reeves into the system of Smith to change the predetermined distance according to the alarm information because increasing the intensity of the audible warning as the distance between the transmitter vehicle and receiver vehicle decreases would allow the driver to advantageously sense the approach distance of the transmitter vehicle.

Regarding claim 14: Smith discloses the radio warning signal is transmitted from the vehicle to any receivers that might be operating within the predetermined distance (col. 6, lines 38-42). Smith does not show changing the predetermined distance for determining according to the type of the alarm information as claimed. However, changing the predetermined distance according to the type of the alarm information is known in the art as taught by Reeves (col. 3, lines 66-67, and col. 4, lines 1-14). Therefore, it would have been obvious to one of ordinary skill in the art to use the teaching of Reeves into the system of Smith to change the predetermined distance according to the alarm information because increasing the intensity of the audible warning as the distance between the transmitter vehicle and receiver vehicle decreases would allow the driver to advantageously sense the approach distance of the transmitter vehicle.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Reeves and further in view of Hayashida et al. [U.S. Pat. 5,926,118].

Regarding claim 7: Reeves discloses changing the predetermined distance according to the alarm information as discussed in claim 6 above but the combination fails to disclose the predetermined distance according to a type of a road where the receiving vehicle is located. However, Hayashida et al. disclose a vehicular navigation apparatus comprising a predetermined distance may be set in accordance with the type of the currently traveled road (figure 10, col. 9, lines 35-47, and col. 10, lines 25-30). Therefore, it would have been obvious to the skilled artisan to use the technique of Hayashida et al. in the system of the combination to set the predetermined distance according to the type of a road in order to extend the use of the device.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Hayashida et al. [U.S. Pat. 5,926,118].

Regarding claim 15: Smith does not disclose the predetermined distance according to a type of a road where the first vehicle is located. However, Hayashida et al. disclose a vehicular navigation apparatus comprising a predetermined distance may be set in accordance with the type of the currently traveled road (figure 10, col. 9, lines 35-47, and col. 10, lines 25-30). Therefore, it would have been obvious to the skilled artisan to use the technique of Hayashida et al. in the system of Smith to set the predetermined distance according to the type of a road in order to extend the use of the device.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Smith et al. [U.S. Pat. 6,529,831] disclose an emergency vehicle locator and proximity warning system.

b. Ohsumi [U.S. Pat. 4,238,778] discloses a system for warning the approach of an emergency vehicle.

c. Shirai et al. [U.S. Pat. 5,751,211] disclose an obstacle warning system for a vehicle.

d. Gross et al. [U.S. Pat. 6,326,903] disclose an emergency vehicle traffic signal pre-emption and collision avoidance system.

e. Sudo [U.S. Pat. 6,038,502] discloses an apparatus and method for fleet control when unmanned and manned vehicles travel together.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung T Nguyen whose telephone number is 703-308-6252. The examiner can normally be reached on 8:00am-5:30pm Mon thru. Friday, with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 703-308-6730. The fax numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

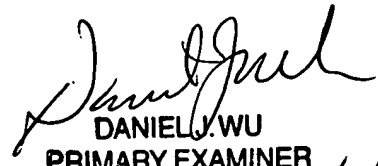
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Examiner: Phung Nguyen

Date: March 6, 2003


DANIEL J. WU
PRIMARY EXAMINER
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